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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,927	04/16/2004	Richard Eugene Crandall	18602-08059/US	1026

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EXAMINER	
TRAN, PHUOC	
ART UNIT	PAPER NUMBER
2624	

MAIL DATE	DELIVERY MODE
11/12/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/826,927	CRANDALL ET AL.	
	Examiner	Art Unit	
	Phuoc Tran	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *2/11/08, 7/29/08*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) *3,6,10,13,17 and 20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-2, 4-5, 7-9, 11-12, 14-16, 18-19, 21-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. Claims 3, 6, 10, 17, 20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/29/08.

2. Applicants' arguments filed 2/11/08 have been fully considered but they are not persuasive.

Applicants argue that claims 1, 4, 7, 8, 14, 15, 18, 21 are statutory because the claims are amended to recite that data is stored on a computer- readable storage medium.

The claimed invention simply applies mathematical functions to abstract digital values (i.e., data) and produces other abstract digital values (i.e., the compressed data). The end result in the claimed invention is abstract **"compressed data"**.

The end product of the claimed invention is simply a set of abstract digital data which is stored a computer- readable storage medium.

If the end product of a claimed invention is a pure number...the invention is nonstatutory regardless of any post-solution activity which makes it available for use by a person or machine for other purposes. In re Walter, 205 USPQ at 407 (CCPA 1980).

See Gottschalk v. Benson, 175 USPQ 673 (S. Ct. 1972).

> It is conceded that one may not patent an idea. But is practical effect that would be the result if the formula... were patented in this case. The mathematical formula involved here has no substantial practical application except in connection with a digital computer, which means that if the judgment below is affirmed, the patent would totally preempt the mathematical formula and in practical effect would be a patent of the algorithm itself.

Applicants argue that Nakayama et al do not disclose or teach yielding first compressed data by using dynamically predicted coefficient values associated with input

data. In response, reference is made to Figure 4 in Nakayama et al. The dynamically predicted coefficient values associated with input data read on the prediction value P and prediction correction error value Cα (see col. 5, lines 16-64).

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1, 4, 7, 8, 11, 14, 15, 18, 21-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1, 4, 7, 8, 11, 14, 15, 18, 21-30 recite the mere manipulation of data or an abstract idea, or merely solve a mathematical problem without a limitation to a practical application. Claims 1, 4, 7, 8, 11, 14, 15, 18, 21-30 merely manipulate data without ever producing a useful, concrete and tangible result. The claimed invention simply applies mathematical functions to abstract digital values (i.e., data) and produces other abstract digital values (i.e., the compressed data).

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 7, 8, 9, 14-16, 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakayama et al (6,711,295).

As to claim 1, Nakayama et al disclose a computer-implemented method for compressing data, the method comprising: applying a dynamic prediction function to the data by using dynamically predicted coefficient values associated with input data to yield first compressed data (Fig. 1, item 102; Fig. 4; col. 5, line 14 – col. 6, line 47); applying a Golomb coding function to the first compressed data to yield second compressed data (Fig. 1, item 104col. 6, lines 44-67); and storing the compressed data on a computer-readable storage medium (col. 18, lines 26-60; Fig. 1; items 104', 113; col. 7, lines 47-51).

As to claim 2, Nakayama et al disclose that the data is image data (col. 3, lines 8-12).

As to claim 7, Nakayama et al disclose that the first compressed data has a Laplacian distribution (col. 4, lines 30-32).

Claims 8, 9, 14-16, 21 recite limitations that are similar to those of claims 1, 2, 7. Therefore, they are rejected for the same reasons applied to claims 1, 2, 7.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were

made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 4-5, 11-12, 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama et al (6,711,295).

As to claims 4- 5, 11-12, 18-19, Nakayama et al disclose all the claim limitations except for transforming RGB domain to YUV domain. Transforming RGB domain to YUV domain is well-known in the art (Official Notice). Nakayama et al clearly suggest such color transformation at column 3, lines 11-18. It would have been obvious to one of ordinary skill in the art to use the well-known color transformation from RGB domain to YUV domain in Nakayama et al for the purpose of reducing amount of data used to represent color information.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuoc Tran whose telephone number is (571) 272-7399. The examiner can normally be reached on MON-FRI.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh M. Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Phuoc Tran/
Primary Examiner, Art Unit 2624